

KUBOTA CORPORATION

EXECUTIVE ORDER U-R-025-0150 New Off-Road

Compression-Ignition Engines

Pursuant to the authority vested in the Air Resources Board by Sections 43013, 43018, 43101, 43102, 43104 and 43105 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-02-003;

IT IS ORDERED AND RESOLVED: That the following compression-ignition engines and emission control systems produced by the manufacturer are certified as described below for use in off-road equipment. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGINE FAMILY	DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)						
2004	4KBXL03.8ACD	3.769	Diesel	8000						
SPECIAL	FEATURES & EMISSION		TYPICAL EQUIPMENT APPLICATION							
	Direct Diesel Injec	ction	Pump, Compressor, Other In	ndustrial Equipment						

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for hydrocarbon (HC), oxides of nitrogen (NOx), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM) in grams per kilowatt-hour (g/kw-hr), and the opacity-of-smoke certification standards and certification levels in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family (Title 13, California Code of Regulations, (13 CCR) Section 2423):

RATED POWER	EMISSION			, l		OPACITY (%)					
CLASS	STANDARD CATEGORY		нс	NOx	NMHC+Nox	co	PM	ACCEL	LUG	PEAK	
37 <u>≤</u> kW < 75	≤ kW < 75 Tier 2 STD N/A N/A CERT		7.5	5.0	0.40	20	15	50			
				6.6	1.9	0.28	2	2	3		

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the information and materials to demonstrate certification compliance with 13 CCR Section 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control system warranty).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

This Executive Order is only granted to the engine family and model-year listed above. Engines in this family that are produced for any other model-year are not covered by this Executive Order.

Executed at El Monte, California on this ______ day of September 2003.

Allen Lyons, Chief

Mobile Source Operations Division

Attachment 1061

Engine Model Sv nary Form

KUBOTA Corporation Manufacturer:

Engine category: Nonroad CI

PA Engine Family: 4KBXL03.8ACD

Mfr Family Name: N/A Process Code: New Submission

4-4-025-0150

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sion Control er SAE J1930	AMA DOT	-	NA H	-						-								
9.Emiss 9. Device Po	7	_	_								-						文化	
8.Fuel Rate: 9.Emisston Control (lbs/hr)@peak torque Device Per SAE J1930	20.1	19.1	18.8															
7.Fuel Rate: mm/stroke@peak torque	60.0	57.0	56.0															
6.Torque @ RPM (SEA Gross)	199.7@1500	194.7@1500	191.8@1500															
5.F (lbs/hr) (for d	32.0	28.4	25.3											:				
4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	55.0	53.0	51.5										and the second s					
3.BHP@RPM (SAE Gross)	81.5@2600	75.6@2400	69.7@2200															
2.Engine Model	V3800-DI-ES	V3800-DI-ES	V3800-DI-ES				 											
	V3800-DI-ES01	V3800-DI-ES02	V3800-DI-ES03				 											